

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,071	04/08/2004	Daniel J. Fisher	59554US002	9195
32692 7590 01/17/2007 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427			EXAMINER	
			MULLER, BRYAN R	
ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER
		·	3723	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MOI	NTHS	01/17/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/821,071	FISHER, DANIEL J.				
Office Action Summary	Examiner	Art Unit				
•	•	3723				
The MAILING DATE of this communication app	Bryan R. Muller ears on the cover sheet with the c					
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 31 Oc	ctober 2006.					
	•					
·—	' 					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-16,28-34,37,38,41 and 42</u> is/are pending in the application.						
4a) Of the above claim(s) 10-13 and 16 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9,14,15,28-34,37,38,41 and 42</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>08 April 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the section for a list of the sec		ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Notice of Draπsperson's Patent Drawing Review (P10-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P					

Art Unit: 3723

DETAILED ACTION

Claim Objections

- 1. Claim 2 is objected to because of the following informalities: claim 2 discloses that the conversion pad has a second major surface opposite said first major surface is adapted to engage the sanding tool. It is assumed that the engagement to the sanding tool is referring to the non-adhesive engagement surface that is releasably attached to the back-up pad, which is part of the sanding tool. Therefore, in order to clarify the claim, it is suggested by the examiner that the applicant change the limitation that "said conversion pad having a second major surface opposite said first major surface adapted to engage the sanding tool" to "the non-adhesive engagement surface comprises a second major surface of the conversion pad, located opposite said first major surface".
- 2. Claim 3 is objected to because of the following informalities: the term "conversation" in line 5 of claim 3 should be changed to "conversion". Also, the rejection under 35 U.S.C. 112 has been withdrawn because it is clear that the applicant is only claiming the conversion pad and that all of the limitations regarding the abrasive article are merely disclosing intended use of the conversion pad. However, the amendments to claim 3 submitted on 10/31/2006, make the claim unclear if the applicant is claiming a second associated mating surface or attempting to claim that the associated mating surface is part of the abrasive article. It is suggested that the applicant remove the amendments made to lines 2-4 of claim 3 clarify the claim. Appropriate correction is required.

Art Unit: 3723

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- 4. Claims 28-32 rejected under 35 U.S.C. 102(b) as being anticipated by Kleemeier (3,527,001).
- 5. In reference to claim 28, Kleemeier discloses a conversion pad (either 13, 14 & 15 or 14 & 15 alone) for attaching an abrasive article to the back-up pad of a sanding tool (the attachment to a back-up pad is intended use; however, in the case that the conversions pad is layers 14 and 15, the conversion pad is attached to back-up pad 13 or in the case that the conversion pad is considered to be layers 13, 14 and 15, the conversion pad is inherently capable of being attached to a back-up pad), said conversion pad comprising first and second opposed major surfaces, said first major surface being adapted for engagement with the back-up pad (again, intended use, but both interpretations of the conversion pad of Kleemeier are inherently capable of engagement with the back-up pad) and said second major surface including an attachment surface including attachment material (15) for attaching said conversion pad with an abrasive article and a non-attachment surface along at least a portion of an edge region of said second surface (there is clearly an annular portion around the outer edge of the first major surface that does not have any attachment material), thereby to

Art Unit: 3723

allow a user to grasp the abrasive article and separate the abrasive article from the conversion pad, wherein said attachment surface and said non-attachment surface each terminate opposite said first major surface, and further wherein said attachment and non-attachment surfaces are co-planar opposite said major surface. As discussed in the previous office action, the resin layer (14) which forms the non-attachment region has one end of the attachment members (16 or 17) of the attachment region disposed therein, thus the attachment region and non-attachment region have sections that are located within the same plane and are thus, co-planar. If the attachment surface is only defined by the terminating ends of the attachment members, as implied by the applicant in the arguments and comments, then the limitation that the attachment and nonattachment surfaces are co-planar is only represented by the applicant's embodiments shown in figures 5a, 5b, 6a and 6b, which represent non-elected species IIIB, providing the non-attachment region by applying a coating to the attachment members in the nonattachment surface. Thus, for the examiner's rejection, regarding the attachment and non-attachment surfaces being co-planar, to be overcome by the applicant's argument defining the attachment surface as being "limited to the terminating ends of the attachment members", claims 28-34 would effectively be withdrawn as reading on previously non-elected species.

Page 4

6. In reference to claim 29, Kleemeier further discloses that said non-attachment region comprises a continuous edge region extending along the entire perimeter of said second surface, as discussed supra.

Art Unit: 3723

7. In reference to claim 30, Kleemeier further discloses that said attachment surface comprises a plurality of mechanical fastening elements.

- 8. In reference to claim 31, Kleemeier further discloses that said mechanical fastening elements comprise hook-type fastening elements (seen in figures 3 and 4).
- 9. In reference to claim 32, Kleemeier further discloses that said conversion pad is circular and said non-attachment region comprises an annular region extending along the entire perimeter of said second surface.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-7, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemeier (3,527,001) in view of Edinger (6,394,887).
- 12. In reference to claim 1, Kleemeier discloses a conversion pad (13, 14 & 15 or 14 & 15 only) for attaching an abrasive article to the back-up-pad (12 or 13) of a sanding tool, said conversion pad having an engagement surface releasably attached to the back-up pad and an attachment system comprising a first major surface including an attachment region (15) with attachment material for attachment with an associated mating surface, and a non-attachment region along at least a portion of an edge (there

is clearly an annular portion around the outer edge of the first major surface that does not have any attachment material) of said first major surface for forming an attachment with the associated mating surface that is weaker (the lack of attachment material will provide no attachment, which is weaker that the attachment between attachment region and the associated mating surface) than the attachment between the attachment region and the associated mating surface, whereby a user can inherently grasp a portion of the abrasive article adjacent the non-attachment region and thereby separate the abrasive article from the first major surface. However, Kleemeier fails to disclose that the engagement surface releasably attached to the back-up pad is a non-adhesive engagement surface. Edinger discloses a similar conversion pad providing multiple attachment systems to attach an adhesive article to a sanding tool and teaches that multiple attachment systems, such as adhesives, hook and loop fasteners or magnets, may be alternately be substituted for one another to accommodate different tools or abrasive articles and that different attachment systems may be desirable for different applications. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the adhesive used to attach the conversion pad (13 and 14) of Kleemeier to the back-up pad (15) of Kleemeier may alternatively be replaced by other attachment systems such as either of a hook and loop fastener or a magnet to accommodate different back-up pads having a corresponding attachment system on a major side thereof. It is further disclosed that the hook or loop attachment systems may be attached to a major surface the conversion pad using an adhesive, however, even if this is the case, the major surface of the conversion pad that will be

releasably attached to the back-up pad would have an engagement surface of the hook or loop fastener system, which is non-adhesive.

- In reference to claim 2, it would further be obvious that said attachment system 13. comprises a first major surface of said conversion pad, the second major surface opposite said first major surface of said conversion pad has a non-adhesive engagement surface, which is adapted to engage the back-up pad of the sanding tool (10).
- In reference to claim 3, the attachment region on the first major surface of the 14. conversion pad disclosed by Kleemeier is inherently capable of to form a releasable connection with an associated mating surface of an abrasive article wherein the associated mating surface comprising a first major surface of the abrasive article, said abrasive article having a second major surface opposite said first major surface including abrasive for abrading a work surface, said releasable connection characterized as being sufficiently secure to resist relative movement of said abrasive article relative to said conversion pad when rotating said abrasive article as part of a sanding operation (col. 2, lines 6-11). Chesley et al. (2001/0001088) is cited as extrinsic evidence that the attachment material disclosed by Kleemeier is capable of releasably engaging an abrasive article as disclosed in claim 3. Chesley discloses several different hook type fasteners that are capable of releasably engaging loop type materials that may be applied to an opposing surface and the fastener elements 16a and 17a, disclosed by Kleemeier, are very similar in structure to fastener elements shown in 2c, 2m and 2h, respectively. Chesley also discloses that the loop type

materials are often provided on a first major surface of abrasive articles, having abrasive material on a second major surface opposing the first. Therefore, it is further obvious that the fastener elements disclosed by Kleemeier are capable of releasably engaging an abrasive article having the loop type material on the first major surface, as disclosed by Chesley.

- 15. In reference to claim 4, Kleemeier further discloses that said attachment region comprises a centrally located region of said first major surface and said non-attachment region comprises a continuous edge region extending around the entire perimeter of said first major surface, as discussed supra.
- 16. In reference to claim 5, Kleemeier further discloses that said attachment surface comprises a plurality of mechanical fastening elements.
- 17. In reference to claim 6, Kleemeier further discloses that said mechanical fastening elements comprise hook-type fastening elements (seen in figures 3 and 4) and similar to the hook type elements disclosed by Chesley, as discussed supra.
- 18. In reference to claim 7, Kleemeier further discloses that said attachment region is a circular region covering a majority of said first major surface and said non-attachment region comprises an annular region extending around the entire perimeter of said major surface.
- 19. In reference to claim 14, Kleemeier further discloses that said attachment region and said non-attachment region are co-planar. The resin layer (14) which forms the non-attachment region has one end of the attachment members (16 or17) of the

attachment region disposed therein, thus the attachment region and non-attachment region have sections that are located within the same plane and are thus, co-planar.

- 20. In reference to claim 15, Kleemeier further discloses that the conversion pad and the abrasive article have substantially the same profile and have aligned outer edges (in the case that the conversion pad is considered to be layers 13, 14 & 15 all used together).
- 21. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemeier (3,527,001) in view of Edinger (6,394,887) as applied to claim 1 and further in view of Long et al (6,210,389).
- 22. In reference to claims 8 and 9, the combination of Kleemeier disclose the attachment system as discussed supra, wherein the non-attachment region of Kleemeier inherently provides an area that allows a user to easily grip the abrasive article for removal, but fails to disclose that the non-attachment region includes fastening elements that have been bent to inhibit attachment of said fastening elements with said associated mating surfaces. Long discloses a fastening system with a lifting region that provides a hook and loop fastening system with an attachment region (52) and a non-attachment region (41) wherein the hook-type fastening elements of the non-attachment region are bent to inhibit attachment of said fastening elements. The attachment system of Long would be more versatile because the attachment material is attached to the entire surface and any desired portion of the hook-type fasteners may be bent to provide a non-attachment region. Also, the hook-type fastening elements are

Art Unit: 3723

easily bent to inhibit fastening, so it would be easier to produce the conversion pad by merely cutting or forming a piece of material to the desired shape and size, having the hook-type fasteners over the entire surface and modifying the desired portion to be the non-attaching region than to produce the conversion pad disclosed by Kleemeier, which is custom formed so that only certain portions of the pad contain the hook-type fasteners. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide one entire surface of the Kleemeier invention with hook-type fastening elements and to bend the hook-type elements in the region that is desired to be non-attaching (in this case around the entire perimeter of the surface), as taught by Long, to provide any desired portion of the attachment surface as the non-attachment region.

- 23. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemeier (3,527,001) in view of Long et al (6,210,389).
- 24. In reference to claim 33, the conversion pad of claims 28 and 30-32, as disclosed by Kleemeier fails to discloses that the non-attachment region includes fastening elements that have been altered to inhibit attachment of the conversion pad with the abrasive pad. Long discloses the fastening system and teaches the advantages of bending the fastening elements, as discussed supra. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide one entire surface of the Kleemeier invention with hook-type fastening elements and to bend the

hook-type elements in the region that is desired to be non-attaching, as taught by Long, as discussed supra.

- 25. In reference to claim 34, Kleemeier further discloses that the conversion pad and the abrasive article have substantially the same profile and have aligned outer edges (in the case that the conversion pad is layers 13, 14 &15 because the abrasive article and pad 13 have the same outer profile and aligned outer edges).
- 26. Claims 37, 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemeier (3,527,001) in view of any one of Ali (4,617,767), Edinger (6,394,887), Clemente (3,875,703) and Manor et al (5,807,161).
- 27. In reference to claim 37, Kleemeier discloses an abrading tool including a back-up pad (13), a conversion pad (14 and 15) connected with the back-up pad (layer 13 is adhered to layer 14; col. 2, lines 41-43), and an abrasive article (20) connected with the conversion pad, wherein the back-up pad and the abrasive article have substantially the same profile and have aligned outer edges, and further wherein the conversion pad comprises first and second opposed major surfaces, said second major surface including an attachment region including attachment material (15) for attaching said conversion pad with the abrasive article and a non-attachment region along at least a portion of an edge region (there is clearly an annular portion around the outer edge of the first major surface that does not have any attachment material) of said second surface, thereby to allow a user to grasp the abrasive article and thereby separate the abrasive article from the conversion pad. However, Kleemeier fails to disclose that the

Art Unit: 3723

conversion pad also has the same profile and aligned outer edges with the back-up pad and the abrasive article. It is well known in the art that combinations of back-up pads, conversion pads and abrasive articles may often use combinations of different sized layers, specifically with circular abrasive pad combinations, the layers may have different diameters, and more commonly it is well known that all layers may have the same profile and aligned outer edges, as disclosed by Ali 4,617,767, Edinger 6,394,887, Clemente 3,875,703 and Manor et al 5,807,161, in order to provide the outer edge of the abrasive article with sufficient support, because it is also well known that the outer edge of similar abrasive discs is often used more and has more pressure exerted thereon than the inner parts of the pad. Thus, support of the outer region is necessary to prevent damage to the outer edges of the abrasive article. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that different sized combinations of back-up pad, conversion pad and abrasive article may be used with the Kleemeier apparatus and further obvious that it would have been desirable to provide a conversion pad of Kleemeier that has the same profile and aligned outer edges with the back-up pad and abrasive article, as disclosed by Ali, Edinger, Clemente and Manor, to provide sufficient support to outer edges of the abrasive article, to prevent damage.

- 28. In reference to claim 38, Kleemeier further discloses that the back-up pad, conversion pad and abrasive article are circular.
- 29. In reference to claim 41, Kleemeier further discloses that the conversion pad is removably connected to the back-up pad. Kleemeier discloses that the back-up pad is

Art Unit: 3723

adhered to the conversion pad, and it is inherent that the two parts, being connected with adhesive, may be removed from one another, either by peeling them apart or by using chemicals to break down the adhesives.

- 30. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kleemeier (3,527,001) in view of any one of Ali (4,617,767), Edinger (6,394,887), Clemente (3,875,703) and Manor et al (5,807,161), as applied to claim 37 and further in view of Long et al (6,210,389).
- 31. As discussed supra, it is obvious, in view of Long, to replace the attachment and non-attachment surfaces of Kleemeier with one entire surface of hook-type fastening elements and to bend the hook-type elements in the region that is desired to be non-attaching, as taught by Long, to provide any desired portion of the attachment surface as the non-attachment region. In this case, the conversion pad (13 and 14) includes a backing defining a first major surface (disclosed in claim 37 as being opposite the surface having the attachment and non-attachment surfaces; thus, the first major surface is the surface of layer 14 that is engaged with the back-up pad 15) and a plurality of fastening elements is extending across the entirety of the face of the backing opposite the first major surface, which is the second major surface having the attachment and non-attachment surfaces.

Art Unit: 3723

Response to Arguments

32. Applicant's arguments filed 10/31/2006 have been fully considered but they are not persuasive. The applicant argues:

- a. Kleemeier does not disclose a back-up pad or a conversion pad, which applicant defines as "a pad removably placed on a surface of a back-up pad to change the attachment system provided on the back-up pad".
- b. Kleemeier does not disclose a conversion pad having a non-adhesive surface for removable engagement with the back-up pad and the Kleemeier requires an adhesive layer 18.
- c. Long is not pertinent prior art because:
 - The fastening elements of Long would not provide sufficient strength for sanding tools.
 - ii. The teaching of the Long reference does not have the same purpose, regarding the inventor's (applicant's) problem, as the claimed invention.
- d. The attachment and non-attachment surfaces disclosed by Kleemeier are not co-planar.
- e. There is no *prima facie* case of obviousness to provide aligned edges of the back-up pad, conversion pad and abrasive article because:
 - i. There is no suggestion or motivation to combine the references.
 - ii. There is no reasonable expectation for success.
 - iii. The references do not teach or suggest all of the claim limitations.

Art Unit: 3723

iv. Kleemeier teaches away from the combination because of the disclosure that the back-up pad 13 is larger than rigid plate 12 to prevent scratching or gouging that may occur if the rigid plate 12 contacts the surface being abraded and that Kleemeier illustrates the back-up pad (13) being larger than the conversion pad (14 and 15).

- 33. In response, the examiner maintains the rejections on the following basis:
 - a. It is clearly explained in the rejections that layers 14 and 15 may be considered a conversion pad, which clearly changes the attachment system of the back-up pad 13 from a smooth surface for receiving adhesive to a surface having hook-type fasteners, or alternatively, layers 13, 14 and 15 may be considered to be the conversion pad, that is inherently capable of being attached to a back-up pad, that would also change the attachment system of the back-up pad from a smooth surface for receiving adhesive to a surface having hook-type fasteners and further, the obvious alteration of Kleemeier, as taught by Edinger (as discussed in relation to claim 1) may provide additional attachment systems to the conversion pad, depending on the corresponding attachment system of a desired back-up pad, which may also change the attachment system of the back-up pad.
 - b. As discussed supra, the Edinger reference has been applied to the Kleemeier reference to make obvious a non-adhesive surface for removable engagement with a back-up pad.
 - c. Long is pertinent prior art because:

Art Unit: 3723

i. The teaching of Long is not applied to Kleemeier to actually replace the hook-type fasteners of Kleemeier with the specific hook-type fasteners of Long. The Long reference is used to teach that the non-attachment surface of Kleemeier may be formed in an alternative way, having hook-type fasteners that may be altered to provide the non-attachment surface. It would further be obvious to one of ordinary skill in the art, in view of the Kleemeier and Long combination to ensure that the hook-type fasteners would provide sufficient strength for the desired use of the Kleemeier apparatus.

- ii. The teaching of Long discloses that altered hook-type fastening elements provide a non-attachment surface and specifically discloses that the non-attachment region provides for "ease of unfastening and removal" in col. 2, lines 13 and 14. The examiner asserts that the ease of unfastening is the same problem considered by the applicant when providing the non-attachment region. The applicant specifically discloses that the field of the invention is "an attachment system that allows an abrasive article to be easily attached to or separated from the sanding tool". Thus the Long reference and the inventor's (applicant's) problem are both to provide an attachment system, both referring to hook-type fasteners, that provides easy detachment of one article to or from another.
- d. As discussed supra, the examiner maintains the rejection that the attachment and non-attachment surfaces of Kleemeier are co-planar. Also

Art Unit: 3723

discussed supra, the applicant's argument that the attachment surface, which is co-planar with the non-attachment surface, is defined by the terminating ends of the attachment members, is only supported by the applicant's embodiments shown in figures 5a, 5b, 6a and 6b, which represent non-elected species IIIB. Thus, in order for the examiner's rejection, regarding the attachment and non-attachment surfaces being co-planar, to be overcome by the applicant's argument defining the attachment surface as being "limited to the terminating ends of the attachment members", claims 28-34 would effectively be withdrawn as reading on previously non-elected species.

- e. The *prima facie* is established because:
 - i. The examiner clearly provides the motivation to combine references as providing support to the outer edges of the abrasive article to prevent damage to the abrasive article.
 - ii. There clearly is reasonable expectation for success, as shown in the multiple references cited (Ali, Edinger, Clemente and Manor) that also provide back-up pads, conversion pads and abrasive articles all having substantially the same profile and aligned outer edges.
 - iii. The secondary references provided by the examiner clearly teach or suggest the claim limitations that are not specifically disclosed by the Kleemeier reference and support the examiner's previous statement that it is old and well known to provide abrasive tools having back-up pads,

Art Unit: 3723

conversion pads and abrasive articles, all having the same profile and aligned outer edges.

Page 18

iv. The examiner agrees that Kleemeier discloses that the back-up pad 13 is larger than rigid plate 12. However, the claims do not require that the rigid support plate also have the same profile or aligned outer edges with the back-up pad, conversion pad or abrasive article. Further, although Kleemeier does illustrates the back-up pad (13) being larger than the conversion pad (14 and 15), the illustration does not provide any reason to believe that the apparatus would not properly function having a back-up pad, conversion pad and abrasive article all having the same profile and aligned outer edges, thus the illustration of the preferred embodiment disclosed by Kleemeier does not teach away from the examiner's motivation to alter the Kleemeier reference.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ali (4,617,767) discloses a sanding tool having a conversion pad similar to the applicant's claimed conversion pad and provides a non-attachment portion, as part of the support structure, that is present for the same purposes that the applicant discloses in the specification of the current application: Also, Edinger

(6,394,887), Clemente (3,875,703) and Manor et al (5,807,161) all disclose sanding apparatus' having similar structure to the applicant's claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in 35. this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan R. Muller whose telephone number is (571) 272-4489. The examiner can normally be reached on Monday thru Thursday and second Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail III can be reached on (571) 272-4485. The fax phone

Art Unit: 3723

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRM BRM 1/3/2007

Joseph J. Hail, III Supervisory Patent Examiner Technology Center 3700